



NATIONAL INTELLECTUAL PROPERTY
RIGHTS COORDINATION CENTER

NASA SUPPLY CHAIN QUALITY ASSURANCE CONFERENCE – OCTOBER 2018
COUNTERFEIT PRODUCTS IN DoD AND NASA SUPPLY CHAINS



IPR Center- 23 U.S. Federal and International Agencies

The IPR Center Mission: To promote national security by protecting the public's health and safety, the U.S. economy, our war fighters, and to stop predatory and unfair trade practices that threaten the U.S. and global economies.





IPR Center Organizational Chart





GLOBAL FOOTPRINT



- 67 Attaché Offices and 8 DOD Liaisons in 50 countries



FOOTPRINT OF CBP



328 Ports of Entry

\$6.3 Billion Worth of Goods Imported Daily

79,000 Cargo Containers Processed Daily (Sea/Air/ Land)

89,000 Merchandise Entries Processed Daily

More Than 325,000 Importers of Record

Over 275,000,000 International Mail Shipments Annually

Enforce Nearly 500 Laws for 47 Partner Agencies

CBP Collects \$46 Billion in Revenue Annually



**U.S. Customs and
Border Protection**





WHAT DOES IP THEFT JEOPARDIZE?

Collectively:



National Security



Public Health
& Safety



War
fighters



U.S. Economy



DID YOU KNOW?

In the most recent survey, international trade in counterfeit and pirated products represented **up to 2.5% of world trade**, or an amount of as much as **\$461 billion USD**. This is equivalent to the full **GDP of a country such as Austria**.

- This represents a significant potential economic loss for rights holders, governments, and the global economy.
- Criminal networks behind the illicit trade derive significant revenues from their activities.
- This shows that in the context of a revival of international trade, with many opportunities for counterfeiters and criminals in the globalized world economy, the magnitude of counterfeit and pirated trade seems to be on the rise.

Source:

The Organization for Economic Co-operation and Development (OECD) and European Union Intellectual Property Office (EUIPO). (April 18, 2016), *Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact*, OECD Publishing, Paris.



2016 STATS

Number of Seizures
31,560

Total FY 2016 MSRP
\$1,382,903,001



China 45%



Hong Kong 43%



All Others:

Commodities	Percentage Totals	MSRP
Watches/Jewelry	47%	\$653,590,442
Handbags/Wallets	17%	\$234,078,645
Wearing Apparel/Accessories	8%	\$110,805,624
Consumer Electronics/Parts	9%	\$122,892,442
Pharmaceuticals/Personal Care	5%	\$73,716,381

For Each \$1000 Invested:

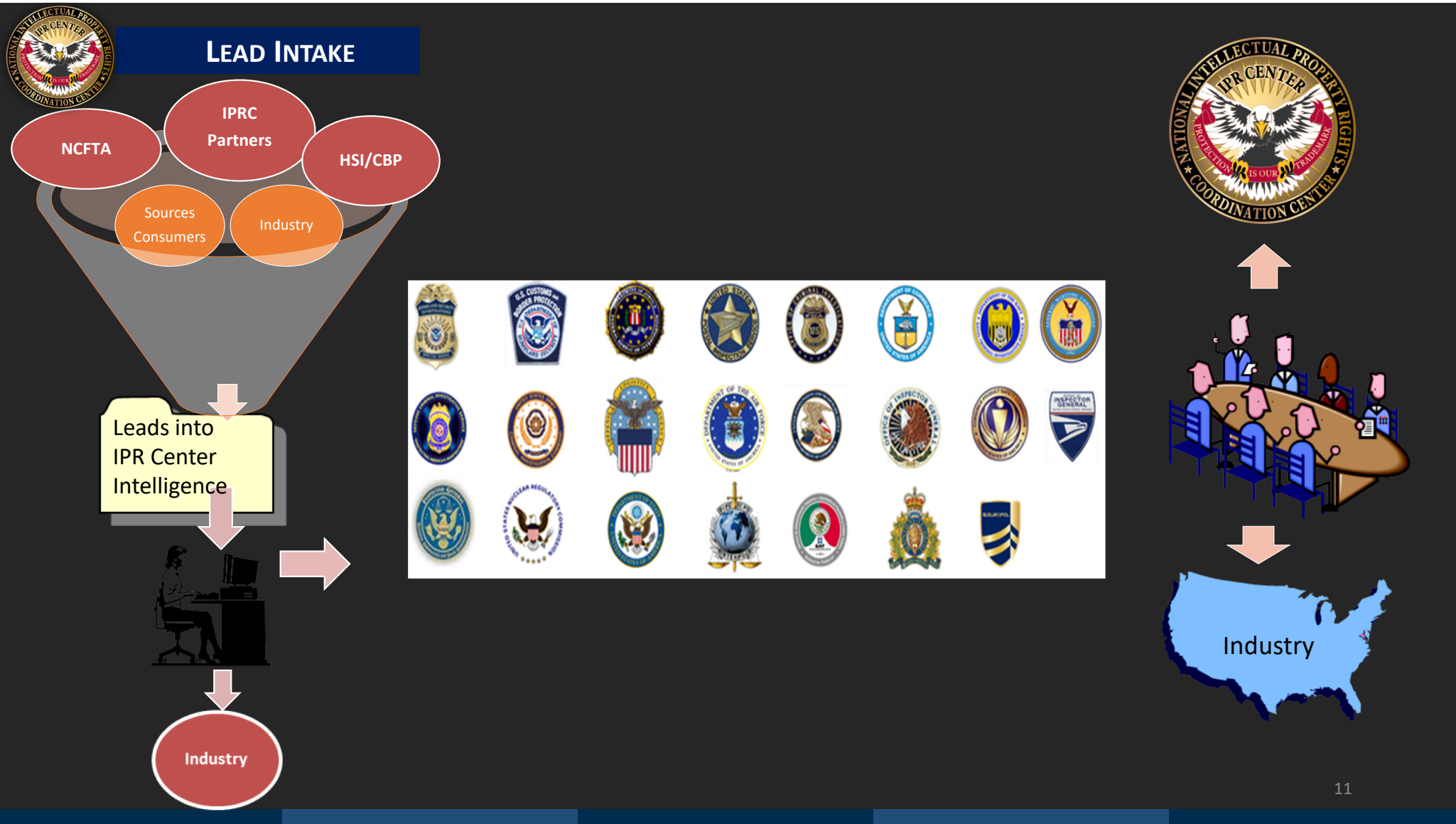
Crime	Return on Investment
Counterfeit Money <small>*Source- Secret Service</small>	\$3,000 = 330%
Credit Card Fraud <small>*Source- MC, Visa, Discover</small>	\$6,700 = 570%
Heroin <small>*Source- DEA</small>	\$19,860 = 1,886%
Tobacco Smuggling <small>* Source- Major Tobacco Companies (2)</small>	\$43,000 = 4,200%
Software Piracy <small>*Microsoft</small>	\$40,000 - \$100k = 3,900% - 9,900%
Fake Pharmaceuticals <small>*Manufacturing prices of obtaining bulk</small>	\$300,000 = 29,900%

Note: These are rough estimates of hypothetical returns on investment in various crimes compiled by EUROPOL



The Threat







IPR CENTER OPERATIONS



OPERATION ENGINE NEWITY



OPERATION SURGE PROTECTOR



ILLICIT CYBER COMMERCE



OPERATION APOTHECARY

OPERATION PLASTIC BEAUTY

Addresses the threats of counterfeits in:

- Automotive
- Aerospace
- Rail
- Heavy machinery components

- Consumer Electronics

- Operation Team Player
- Operation In Our Sites
- Operation Transatlantic

- Counterfeit pharmaceuticals
- Counterfeit health & beauty products
- Counterfeit medical devices



HSI TRADE PROGRAMS (ANTI-DUMPING, FORCED LABOR, WILDLIFE, TOBACCO, TEXTILES)



OPERATION ENGINE NEWITY



Aircraft Parts

Addresses the threat to health and safety posed by counterfeit:

- Automotive
- Aerospace
- Rail
- Heavy machinery components



Wheels



Bearings



Airbags



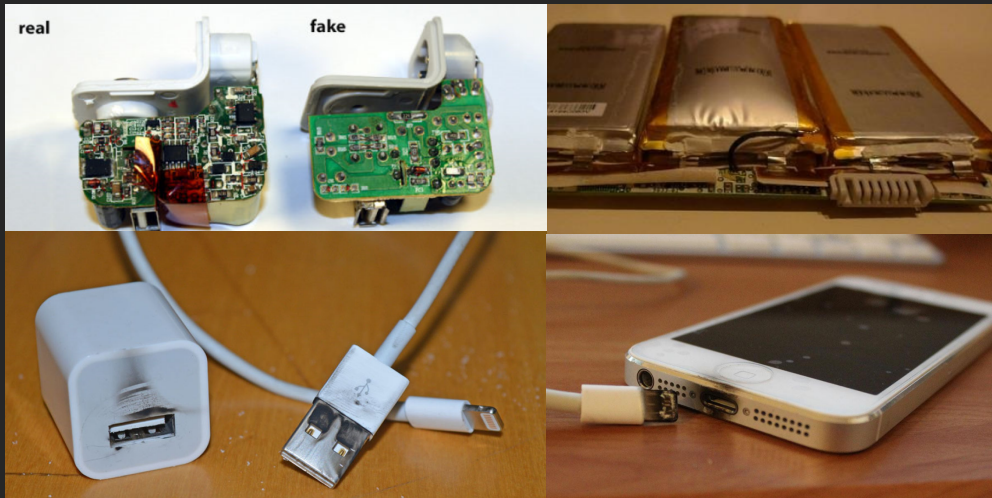
Counterfeit Airbag





OPERATION SURGE PROTECTOR

- Cell Phones / Tablets
- Batteries
- Charging Cables and Adapters
- Emerging Technology



c|net REVIEWS NEWS VIDEO HOW TO SMART HOME CARS DEALS DOWNLOAD

iPhone-related death in China could be linked to fake charger

The reported electrocution of an iPhone owner in China last week is now said to stem from the use of a faulty third-party charger.





ILLICIT CYBER COMMERCE

Focuses on developing investigations that identify targets, assets, and financial schemes used while operating infringing domain names of websites

Operations:

- In Our Sites
- Transatlantic
- Team Player



Operation In Our Sites

**National IPR
Coordination Center**
Protection Is Our Trademark
1-866-IPR-2060
IPRCenter@dhs.gov
www.ice.gov

**Taking Aim to Stop
the Sale of Counterfeit
and Pirated Items**



**National Intellectual
Property Rights
Coordination Center**





APOTHECARY & PLASTIC BEAUTY

- Counterfeit pharmaceuticals
- Counterfeit health & beauty products
- Counterfeit medical devices



Lipitorwithoutprescription.net

Perfectrxpreparations.com

Beautifulplushealthy.com

Healthshop-online.com



HSI TRADE PROGRAMS



Anti-Dumping & Countervailing Duties (AD/CVD)

Transshipment, misclassification and other schemes to evade the payment of special import duties.



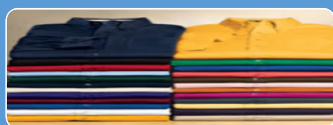
Wildlife Trafficking & Environmental Crimes

Illegal smuggling of wildlife, fish, or illegally logged wood or plants. Includes Executive Order 13648 on Combatting Wildlife Trafficking.



Tobacco Smuggling

Counterfeit, smuggling/trafficking, and stolen tobacco products; tax evasion.



Textiles Investigations

Textiles have the highest duty rate of all commodities imported into the U.S., Textile Production Verification Teams (TPVTs).



Forced Labor

The illegal exportation of merchandise into the U.S. in violation of 19 U.S.C. § 1307, which prohibits the importation of goods produced by convict, forced or indentured labor under penal sanction, including forced or indentured child labor.



Outreach & Training

DOMESTIC TRAINING

- Coordinates with HSI field offices to:
 - provide training in partnership with CBP
 - provide training in partnership with such entities as the International Anti-Counterfeiting Coalition's Foundation, the National Association of Attorneys General and the National White Collar Crime Center in support of their domestic IPR training efforts
- Provides training to HSI employees recently assigned to the NCR
- Supports HSI field offices by providing brochures, presentations, and/or documentation to support their training efforts



OUTREACH & TRAINING

INTERNATIONAL TRAINING

- Creates partnerships with foreign law enforcement, private industry, and academia
- Conducts training and capacity building with foreign law enforcement and regulatory agencies
- Briefs industry sectors, law enforcement, and government
- Supports additional training by partnering with:
 - International Law Enforcement Academies (ILEA)
 - Bureau of International Narcotics and Law Enforcement Affairs (INL)
 - Europol
 - INTERPOL
 - Attaché networks



THE "BUTTON"

The screenshot shows the NFL Shop website interface. At the top, there's a navigation bar with the NFL Shop logo, a search bar, and links for customer service, track order, request catalog, my account, and my cart. Below this is a secondary navigation bar with categories like Shop by Team, Jerseys, Men's, Women's, Kids', T-Shirts, Sweatshirts, Hats, Collectibles, Home & Office, and Tailgating. The main content area features a large, prominent yellow button with the text "To Report IP Theft" at the top and "Click Here" at the bottom. In the center of the button is the IPR Center logo, which includes an eagle and the text "NATIONAL INTELLECTUAL PROPERTY CENTER" and "PROTECTION IS OUR TRADEMARK". Below the button, there's a footer section with links to "GO INSIDE THE NFL SHOP", "SPECIAL OFFERS, SAVINGS ALERTS AND MORE", "NFL SHOP GIFT CARD", and "OFFICIAL NFL SHOP GIFT CARDS AND ONLINE GIFT CERTIFICATES". At the very bottom, there's a small section with logos for NFLPA, VISA, FedEx, and a "REPORT FRAUDULENT NFL SHOPPING SITES" link.





NATIONAL INTELLECTUAL PROPERTY RIGHTS COORDINATION CENTER



HSI

HOMELAND SECURITY INVESTIGATIONS

OPERATION CHAIN REACTION

NASA SUPPLY CHAIN QUALITY ASSURANCE CONFERENCE — OCTOBER 2018

COUNTERFEIT PRODUCTS IN DoD AND NASA SUPPLY CHAINS





The Counterfeiting Problem

“...Robert P. Ernst, who heads research into counterfeit parts for the Naval Air Systems Command’s Aging Aircraft Program...estimates that as many as **15% of all the spare and replacement microchips the Pentagon buys are counterfeit.** As a result, he says, ‘we are having field failures regularly within our weapon systems-and in almost every weapon system.’ He declines to provide details..”



http://images.businessweek.com/ss/08/10/1002_counterfeit_narrated/index.htm



Operation Chain Reaction

- FIRST - Operation Chain Reaction (OCR) targets counterfeit items entering the supply chain of the Department of Defense (DoD) and other U.S. government agencies
- Sixteen (16) Federal Agencies participate in OCR

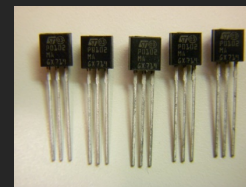
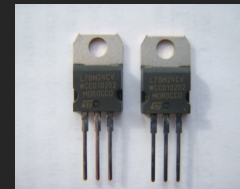




OCR Initial Product Focus

Integrated circuit (aka IC, semiconductor, microcircuit, microchip, silicon chip, or chip)

WHY?



EASY to counterfeit...and...



Where Integrated Circuits End Up

1. IC applications -

- Consumer electronics
- Automotive
- Medical
- Aircraft
- Spacecraft
- Military
- SCADA

2. Counterfeit ICs can result in -

- Product malfunction or product failure, loss of property
- Serious bodily injury, including electrical shock, electrocution, and/or death
- Cyber Threat concern

Everything that has an on and off switch.....has an IC in it.



Expanding Focus

- Currently working with CBP to target shipments
- Will be meeting with Cisco's brand protection investigators to combine efforts





OCR Strategy

TWO Primary goals

1. Pursue Criminal Investigations

- Develop referral packages (leads and conduct requested trade data analysis)
 - Analyze seizure and import patterns from CBP trade data
- Deconflict leads with our partners
 - Coordinate with manufacturers to verify authenticity

2. Raise Quality Assurance

- Demonstrate National Security implications of current methodology of procuring microelectronics within DoD and USGOV
 - Coordinate with USGOV leadership
 - Prevent them entering the supply chain



USA – largest exporter of e-waste
China – largest importer of e-waste and largest exporter of counterfeit electronics





Supply Chain Challenges Facing DOD and USG

- Aging technologies and systems
 - Obsolete sustainment parts
 - OEM doesn't manufacture part anymore
- Government Cost savings
 - Websites / brokers that offer parts (not vetted – acquisition training)
 - Companies compete for government contracts as the sub tier suppliers – not the Prime
- Operating/production costs
 - Too high to create new equipment at the speed technology advances
 - Most new projects take 10 yrs to develop / and test operationally
- DOD and USGOV working on methods for early detection processes to ID CFs



Food for Thought: Money or Espionage?



- Chinese are major supplier of bogus products BUT are not the only ones in the game
- Cost (ballpark) of supplier basic chip/microelectronic \$1.00; cost of chip stamped with military or DLA part number \$100.00
- Since Chinese are a major supplier and “we” cannot get open cooperation in China, not easy to identify who is pulling the strings
- Numerous U.S. companies with no affiliation to Chinese other than business almost certainly doing it for the money



Execution of OCR Strategy

- **PARTNER**
 - Law Enforcement
 - RDA—Identification of key technologies in development
 - SCRM—Identification of products within the SC
 - Procurement (USG)
 - Commercial
 - Industry
 - Administrative
 - CBP-Product Authentication
- **MITIGATE THREATS (Proactive)**
- **PURSUE CRIMINAL/NEFARIOUS ACTIVITY (Reactive)**
- **EDUCATE**
 - LE
 - Procurement
 - Health & Safety



Detecting Possible Fraud in the Acquisition Process

Examples:

- Counterfeit parts
- Product Substitution
- Cost Mischarging
- Progress payment fraud

Fraud Indicators:

- Serial numbers missing
- Inspection reports that appear altered by whiteouts
- Requests for payment that are inconsistent with earlier cost history
- History of frequent invoice/voucher errors, poor documentation, & claiming unallowable costs
- Little or no physical progress on the contract even though significant costs have been billed



Source: Genuine-Performance.com News Alert



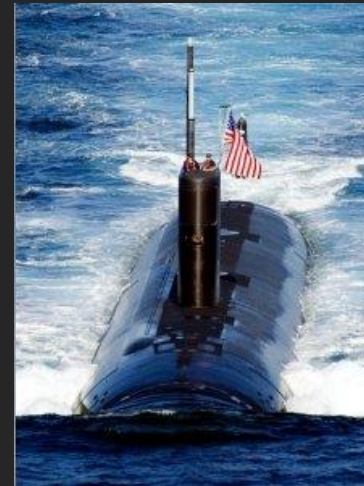
Process for Information Sharing of CF

- Rights holder / Consignee identifies a part that is counterfeit, fraudulent, and/or suspect item
- OEM sends part and company information to IPR Center OCR Program Manager
OperationChainReaction@ice.dhs.gov
- OCR team conducts research to identify preliminary information on the company
- OCR team deconflicts with task force partners and potentially disseminates information as an investigative lead
- OCR team may also share information back with industry



Success Stories

Case Examples



- June 2014 – Peter Picone, owner of *Epic International Electronics Inc.* was convicted of selling millions of dollars in **counterfeit integrated circuits (IC)** from 2007 – 2012
- The counterfeit ICs were knowingly sold to U.S. Navy contractors to be used in **nuclear submarines**
- Oct 2015 – Sentenced to 37 months in prison, forfeiture of over 70k and 40k ICs, and restitution payment of over 350k.



- **April 2014** – former CEO of Powerline Inc. was convicted of selling more than \$2.6 million in **counterfeit batteries** to the DoD.
- The batteries were installed on numerous **Naval vessels**, like; Nuclear aircraft carriers, Minesweepers, Ballistic Submarines
- **Oct 2014** – Sentenced to 87 months in prison & forfeiture of \$2.7M



- **September 2016** – Michael Westcott, owner of Lightning Technology Inc., convicted of manufacturing and selling \$4 million in counterfeit Cisco transceivers from 2006 to 2015
- Cisco transceivers, including several of the long range models counterfeited by Lightning, are used by the U.S. Navy in critical communication systems in **nuclear submarines, aircraft carriers, ship self-defense systems, and ballistic missile defense systems**



Chatsworth Rubber and Gasket Case

- Product Substitution
- The owner of a business supplied substandard O-Rings to NASA that were used on various aircraft
- Individual was sentenced to 30 months in prison, 3 years of supervised release and restitution of \$216,848





VisionTech Components Case

Impact of Counterfeit Parts



U.S. Department of Justice

Ronald C. Machen Jr.
United States Attorney for the
District of Columbia

Judiciary Center
555 Fourth St. N.W.
Washington, D.C. 20530

PRESS RELEASE

FOR IMMEDIATE RELEASE
Tuesday, October 25, 2011

For Information Contact:
Public Affairs
(202) 252-6933
<http://www.justice.gov/usao/dc/index.html>

**Administrator of VisionTech Components, LLC Sentenced
To 38 Months in Prison For Her Role in Sales of Counterfeit
Integrated Circuits Destined to U.S. Military and Other Industries**
- Counterfeit Devices Were Sold to U.S. Navy and Defense Contractors -

Administrator of Florida-based distributor sentenced to 38 months in prison in connection with sales of counterfeit high-tech devices destined to the U.S. military and other industries

First federal prosecution in a case involving the trafficking of counterfeit integrated circuits

Counterfeit integrated circuits can result in product or system failure or malfunction, and can lead to costly system repairs, property damage, and serious bodily injury, including death. They also raise national security concerns because their history is unknown.

According to government's evidence, company owner and others imported approximately 59,540 integrated circuits bearing counterfeit marks, including military-grade markings, from China and Hong Kong to U.S.



M&M Int'l Aerospace Metals

DEFENDANT PLEADS GUILTY TO FALSIFYING TEST REPORTS OF METALS FOR USE IN SPACE PROGRAM

January 19, 2007

FOR IMMEDIATE RELEASE



- Quality Control Fraud
- Subcontractor sold metals for use on NASA's orbiter fleet and critical ground support equipment
- When test results and specifications did not conform with customers' purchase order requirements, company altered:
 - Test certificates from metal testing laboratories
 - Mill reports of metals manufacturers
 - Certificates of compliance from metal distributors
- All parties convicted – sentences ranging from >2yrs to probation and restitution >\$390k, company and owners debarred from working on fed contracts



Damage Caused in Other Cases

- Naval Destroyers failed training launch of Tomahawk Missile Systems
- Installation into communications array of Coast Guard helicopters (HSI identified)
- Located in LANTERN Program of F-14 Tomcats





OCR Success

- From FY2014 to FY2017:
 - Approximately \$19 million (MSRP) seizures - CF goods and proceeds
 - 33 arrests
 - 47 indictments
 - 34 convictions

**GREAT job...but...
our work is not done!**



QUESTIONS?

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